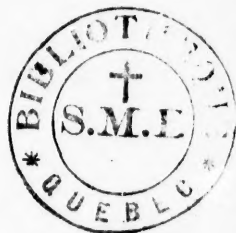


CLOSING EXAMINATIONS

FOR

PROVINCIAL SCHOOL LICENSE.

MAY AND JUNE, 1898.

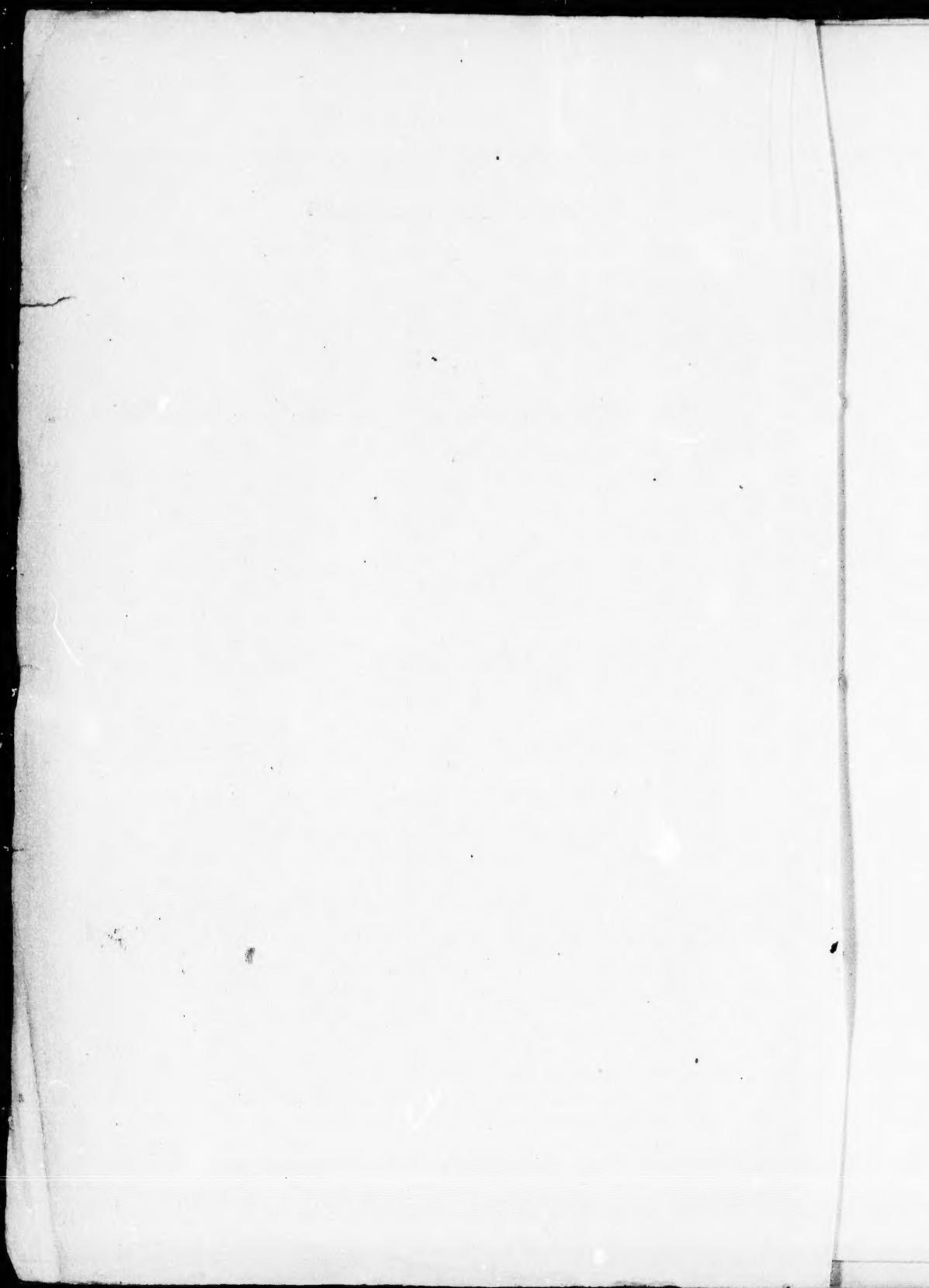


EXAMINERS, 1898.

Mathematics—THOMAS HARRISON, M.A., LL.D., and PROF. S. DIXON, B.A.
Language and Literature—PROF. H. S. BRIDGES, M.A., Ph.D.
Natural Science and History—PROF. L. W. BAILEY, M.A., Ph.D., F.R.S.C.
Teaching, School Management, etc.—G. W. MERSEREAU, M.A., and G. U.
HAY, M.A.
Industrial Drawing, Geography, etc.—MR. J. VROOM.

Closing examinations shall be held each year at Fredericton, St. John, and Chatham, beginning at 9 o'clock, a. m., on the second Tuesday in June. For Student Teachers in the French Department, and other Candidates for Third Class License, a closing examination for Third Class only shall be held at Fredericton twice each year, beginning respectively on the Tuesday next preceding the last Friday of May and on the Tuesday next preceding the week in which Christmas falls. All candidates who are required to be examined in Reading at the Fredericton station, shall present themselves in the Assembly Hall of the Normal School at 2 o'clock, p. m., on the day immediately preceding the date fixed for the opening of the written examination, for examination in Reading.—Reg. 31, 3.

To be eligible for the Closing Examinations all Candidates, whether for Advance of Class or otherwise, must have previously passed the Preliminary Examinations.



Education Department, New Brunswick.

GRAMMAR SCHOOL.

GREEK.

H. S. BRIDGES, M.A., Ph.D., EXAMINER. *Time, 2 hours.*

NB. Candidates may select any three passages, but the passages selected must be from different authors.

I. Translate into English :

Ἄλλ' ἔστι μὲν ἡμῖν, ὦ ἄνδρες, ἡ ἀρχὴ ἡ πατρώα πρὸς μὲν μεσημβρίαν μέχρις οὗ διὰ καῦμα οὐ δύναται οἰκεῖν ἄνθρωποι, πρὸς δὲ ἄρκτον μέχρις οὗ διὰ χιμῶνα· τὰ δ' ἐν μέσῳ τούτων ἅπαντα σατραπεύουσιν οἱ τοῦ ἐμοῦ ἀδελφοῦ φίλοι. Ἦν δ' ἡμεῖς νικήσωμεν, ἡμᾶς δὲ τοὺς ἡμετέρους φίλους τούτων ἐγκρατεῖς ποιῆσαι. Ὡστε οὐ τοῦτο δέδοικα, μὴ οὐκ ἔχω ὃ τι δῶ ἐκάστῳ τῶν φίλων, ἂν εὖ γένηται, ἀλλὰ μὴ οὐκ ἔχω ἱκανοὺς οἷς δῶ. Ὑμῶν δὲ τῶν Ἑλλήνων καὶ στέφανον ἐκάστῳ χρυσοῦν δώσω.

XEN. *Anab.* I. Cap. 7, Sect. 6, 7.

Ἐπεὶ δὲ ταῦτα εἶπον, μεταστησάμενος αὐτοὺς ὁ Κλέαρχος βουλευέτο. Καὶ ἐδόκει τὰς σπονδὰς ποιέεσθαι ταχύ, καὶ καθ' ἡσυχίαν ἐλθεῖν τε ἐπὶ τὰ ἐπιτήδεια καὶ λαβεῖν. Ὁ δὲ Κλέαρχος εἶπε· Δοκεῖ μὲν ἡμῶν ταῦτα· οὐ μόντοι ταχύ γε ἀπαγγελῶ, ἀλλὰ διατρίψω ἔστ' ἂν ὀκνήσωσιν οἱ ἄγγελοι

μὴ ἀποδόξῃ ἡμῖν τὰς σπονδὰς ποιήσασθαι · οἶμαί γε μέντοι,
ἔφη, καὶ τοῖς ἡμετέροις στρατιώταις τὸν αὐτὸν φόβον παρέ-
σεσθαι. Ἐπεὶ δὲ ἐδόκει καιρὸς εἶναι, ἀπήγγελλεν ὅτι σπέν-
δοιτο, καὶ εὐθὺς ἡγείσθαι ἐκέλευε πρὸς τὰ ἐπιτήδεια.

XEN. *Anab.* II. Cap. 3, Sect. 8, 9,

Ὡς φάτο Πηλεΐδης, ποτὶ δὲ σκῆπτρον βάλε γαίῃ
χρυσείοις ἥλοισι πεπαρμένον, ἔζετο δ' αὐτός·
Ἀτρεΐδης δ' ἐτέρωθεν ἐμήνιε. τοῖσι δὲ Νέστωρ
ἡδυεπὴς ἀνόρουσε, λιγύς Πυλίων ἀγορητής,
τοῦ καὶ ἀπὸ γλώσσης μέλιτος γλυκίων ῥέεν αὐδὴ.
τῷ δ' ἦδη δύο μὲν γενεαὶ μερόπων ἀνθρώπων
ἐφθίαθ', οἳ οἱ πρόσθεν ἅμα τράφεν ἦδ' ἐγένοντο
ἐν Πύλῳ ἡγαθήῃ, μετὰ δὲ τριτάτοισιν ἄνασεν.
ὁ σφιν εὐφρονέων ἀγορήσατο καὶ μετέειπεν.

HOM. *Iliad* I. vv. 245-253.

Ὡς ἔφατ', οὐδ' ἀπίθσεν ἀναξ ἀνδρῶν Ἀγαμέμνων·
αὐτίκα κηρύκεσσι λιγυφθόγγοισι κέλευσεν
κηρύσσειν πολεμόνδε κερηκομόωντας Ἀχαιοὺς.
οἳ μὲν ἐκήρυσσον, τοὶ δ' ἡγείροντο μάλ' ὦκα.
οἳ δ' ἄμφ' Ἀτρεΐωνα διοτρεφεές βασιλῆες
θῦνον κρίνοντες, μετὰ δὲ γλαυκῶπις Ἀθήνη
αἰγίδ' ἔχουσ' ἐρίτιμον, ἀγήρων, ἀθανάτην τε,
τῆς ἑκατὸν θύσανοι παγχρύσειοι ἡερέθονται,
πάντες εὐπλεκέες, ἐκατόμβοιοι δὲ ἕκαστος.

HOM. *Iliad* II. vv. 441-449.

Ἦ ῥα, καὶ ἐς δίφρον ἄρνας θέτο ἰσόθεος φῶς,
ἂν δ' ἄρ' ἔβαιν' αὐτός, κατὰ δ' ἡγία τείνεν ὀπίσσω·
πὰρ δέ οἱ Ἀντήνωρ περικαλλέα βῆσέτο δίφρον.
τῷ μὲν ἄρ' ἄψορροι προτὶ Ἴλιον ἀπονέοντο·
Ἐκτωρ δὲ Πριάμοιο πάϊς καὶ διὸς Ὀδυσσεύς

χώρον μὲν πρῶτον διεμέτρεον, αὐτὰρ ἔπειτα
κλήρους ἐν κυνέῃ χαλκήρεϊ πάλλον ἐλόντες,
ὁππότερος δὴ πρόσθεν ἀφείη χάλκεον ἔγχος.
λαοὶ δ' ἠρήσαντο, θεοῖσι δὲ χεῖρας ἀνέσχον.

HOM. *Iliad* III. vv. 310 318.

Ἄλλ' ὅτε δὴ δεκάτῃ ἐφάνη ῥοδοδάκτυλος ἠώς,
καὶ τότε μιν ἐρέεινε καὶ ἦτεε σῆμα ἰδέσθαι,
ὅ ττί ῥά οἱ γαμβροῖο πάρα Προίτιο φέροιτο.
αὐτὰρ ἐπεὶ δὴ σῆμα κακὸν παρεδέξατο γαμβροῦ,
πρῶτον μὲν ῥα Χίμαιραν ἀμαιμακέτην ἐκέλευσεν
πεφνέμεν. ἦ δ' ἄρ' ἔην θεῖον γένος, οὐδ' ἀνθρώπων,
πρόσθε λέων, ὅπιθεν δὲ δράκων, μέσση δὲ χίμαιρα,
δεινὸν ἀποπνέουσα πυρὸς μένος αἰθομένοιο.
καὶ τὴν μὲν κατέπεφνε θεῶν τεράεσσι πιθήσας.

HOM. *Iliad* VI. vv. 175-183.

Οὗτος, τί σεμνὸν καὶ πεφροντικὸς βλέπεις;
οὐ χρὴ σκυθρωπὸν τοῖς ξένοις τὸν πρόσπολον
εἶναι, δέχεσθαι δ' εὐπροσηγόρῳ φρενί.
σὺ δ' ἄνδρ' ἐταῖρον δεσπότην παρόνθ' ὁρῶν,
σττυγνῶ προσώπῳ καὶ συνωφρυνμένῳ
δέχει, θυραίου πῆματος σπουδὴν ἔχων.
δεῦρ' ἔλθ', ὅπως ἂν καὶ σοφώτερος γένη.
τὰ θνητὰ πράγματ' οἶδας ἣν ἔχει φύσιν;
οἶμαι μὲν οὐ· πόθεν γάρ; ἀλλ' ἄκου' ἐμοῦ.

EUR. *Alcestis*, vv. 773-781.

Δεῖ μ', ὥς ἔοικε, μὴ κακὸν φῦναι λέγειν,
ἀλλ' ὥστε ναὸς κεδνὸν οἰακοστρόφον
ἄκροισο λαίφους κρασπέδοις ὑπεκδραμεῖν
τὴν σὴν στόμαργον, ὧ γύναι, γλωσσαλγίαν.
ἐγὼ δ', ἐπειδὴ καὶ λίαν πυργοῖς χάριν,

Κύπριν νομίζω τῆς ἐμῆς ναυκληρίας
σώτειραν εἶναι θεῶν τε κἀνθρώπων μόνην.
σοὶ δ' ἔστι μὲν νοῦς λεπτύς, ἀλλ' ἐπίφθονος
λόγος διαλθεῖν, ὡς Ἔρως σ' ἠνάγκασε
τόξοις ἀφύκτοις τοῦμὸν ἐκσῶσαι δεμας.

EUR. *Medea*, vv. 522-531.

Σὺ νυν ἀφείς σεαυτὸν ὧν λέγεις πέρι
ἐμοῦ ἴπακουσον καὶ μάθ' οὔνεκ' ἔστί σοι
βρότειον οὐδὲν μαντικῆς ἔχον τέχνης.
φανῶ δέ σοι σημεῖα τῶνδε σύντομα.
χρησμὸς γὰρ ἦλθε Λαίῳ ποτ', οὐκ ἐρῶ
Φοίβου γ' ἀπ' αὐτοῦ, τῶν δ' ὑπηρετῶν ἄπο,
ὡς αὐτὸν ἤξοι μοῖρα πρὸς παιδὸς θανεῖν,
ὅστις γένοιτ' ἐμοῦ τε κἀκείνον πάρα.
καὶ τὸν μὲν, ὥσπερ γ' ἡ φάτις, ξείνοι ποτὲ
ληστὰι φονεύουσ' ἐν τριπλαῖς ἀμαξιτοῖς.

SOPH. *Œd. Tyr.* vv. 707-716.

Ἄλλ' ἄνδρα, κεῖ τις ἢ σοφός, τὸ μανθάνειν
πόλλ' αἰσχρὸν οἶδεν καὶ τὸ μὴ τείνειν ἄγαν.
ὁρᾷς παρὰ ρεῖθροισι χειμάρροις ὅσα
δένδρων ὑπέικει, κλῶνας ὡς ἐκσφάζεται·
τὰ δ' ἀντιτείνοντ' αὐτόπρεμν' ἀπόλλυται.
αὐτῶς δὲ ναὸς ὅστις ἐγκρατὴ πόδα
τείνας ὑπέικει μηδὲν, ὑπτίους κάτω
στρέφας τὸ λοιπὸν σέλμασιν ναντίλλεται.
ἀλλ' εἴκε θυμοῦ καὶ μετὰστασιν δίδου.

SOPH. *Antig.* vv. 710-718.

Σὲ τὸν σοφιστήν, τὸν πικρῶς ὑπέρπικρον,
τὸν ἐξαμαρτόντ' εἰς θεοὺς ἐφημέροις
πορόντα τιμάς, τὸν πυρὸς κλέπτῃν λέγω·

πατήρ ἄνωγέ σ' οὔστινας κομπεῖς γάμονε
 αὐδᾶν, πρὸς ὧν ἐκείνος ἐκίπτει κράτους·
 καὶ ταῦτα μέντοι μῆδ' ἐν νικητήριος,
 ἀλλ' αὖθ' ἕκαστ' ἐκφραζε· μῆδέ μοι διπλᾶς
 ὁδοὺς, Προμηθεῦ, προσβάλης· ὅρῳ δ' ὅτι
 Ζεὺς τοῖς τοιούτοις οὐχὶ μαλθακίζεται.

AESCH. *Prom. Vinc.* vv. 944-952.

ΣΩ. Οὐκοῦν ὡμολογήσαμεν, ἃ ἔνεκά του ποιούμεν, μὴ
 ἐκεῖνα βούλεσθαι, ἀλλ' ἐκεῖνο, οὐ ἔνεκα ταῦτα ποιούμεν;

ΠΩΔ. Μάλιστα.

ΣΩ. Οὐκ ἄρα σφάττειν βουλόμεθα οὐδ' ἐκβάλλειν ἐκ
 τῶν πόλεων οὐδὲ χρήματα ἀφαιρεῖσθαι ἀπλῶς οὕτως, ἀλλ'
 εἴαν μὲν ὠφέλιμα ἢ ταῦτα, βουλόμεθα πράττειν αὐτά, βλα-
 βερὰ δὲ ὄντα οὐ βουλόμεθα. τὰ γὰρ ἀγαθὰ βουλόμεθα,
 ὡς φῆς σύ, τὰ δὲ μήτε ἀγαθὰ μήτε κακὰ οὐ βουλόμεθα,
 οὐδὲ τὰ κακὰ. ἢ γάρ; ἀληθῆ σοι δοκῶ λέγειν, ὦ Πῶλε,
 ἢ οὐ; τί οὐκ ἀποκρίνεις;

PLATO, *Gorgias*, xxiv.

*Ἐπεμψαν ἡμᾶς Λακεδαιμόνιοι, ὦ Ἀθηναῖοι, περὶ τῶν
 ἐν τῇ νήσῳ ἀνδρῶν πράξοντας ὅ τι ἂν ὑμῖν τε ὠφέλιμον
 ὦν τὸ αὐτὸ πείθωμεν καὶ ἡμῖν ὡς ἐκ τῶν παρόντων κόσμον
 μάλιστα μέλλη οἶσιν. τοὺς δὲ λόγους μακροτέρους οὐ
 παρὰ τὸ εἰωθὸς ποησόμεθα, ἀλλ' ἐπιχώριον ὦν ἡμῖν οὐ μὲν
 βραχεῖς ἀρκῶσι μὴ πολλοῖς χρῆσθαι, πλέοσι δὲ ἐν ᾧ ἂν
 καιρὸς ἢ διδάσκοντάς τι τῶν προὔργων τὸ δέον πράσσειν.
 λάβετε δὲ αὐτοὺς μὴ πολεμίως μῆδ' ὡς ἀξύνετοι διδισκό-
 μενοι. ὑπόμνησιν δὲ τοῦ καλῶς βουλευσασθαι πρὸς εἰδότας
 ἡγησάμενοι.

THUCYDIDES, Bk. IV. Cap. 17.

Κλεφθέντων δὲ τῶνδε τῶν ἀγαλμάτων οἱ Ἐπιδιῦριοι τοῖσι
 Ἀθηναίοισι τὰ συνέθεντο οὐκ ἐπετέλεον. πέμψαντες δὲ οἱ

Ἀθηναῖοι ἐμῆνιον τοῖσι Ἐπιδαυρίοισι· οἱ δὲ ἀπέφαινον λόγῳ ὥς οὐκ ἀδικέοιεν. ὅσον μὲν γὰρ χρόνον εἶχον τὰ ἀγάλματα ἐν τῇ χώρῃ, ἐπιτελείειν τὰ συνέθεντο, ἐπεὶ δὲ ἐστερηθῆναι αὐτῶν, οὐ δίκαιον εἶναι ἀποφέρειν ἔτι, ἀλλὰ τοὺς ἔχοντας αὐτὰ Αἰγινήτας πρήσσεσθαι ἐκέλευον. πρὸς ταῦτα οἱ Ἀθηναῖοι ἐς Αἰγίναν πέμψαντες ἀπαίτεον τὰ ἀγάλματα· οἱ δὲ Αἰγινῆται ἔφασαν σφίσι τε καὶ Ἀθηναίοισι εἶναι οὐδὲν πρῆγμα.

HERODOTUS, Bk. V. Cap. 84.

2. Parse συναλλαγίντι, νικῶη, στραφέντες, κατελείφθησαν, ἐλοῦσα, διαβῆναι, ἀναστάντες, διειχέτην.
3. In what various ways do adjectives in -ος form their comparatives? Give two instances of each. Compare also εὐσεβής, ἄρπαξ, ἄγχι, ἄνω, πλησίον.
4. Decline αἰδώς, ἥμως, γόνυ in the singular; and ναῦς, γίγας, ἔχθρς in the plural. Give the gen. sing. and dat. plur. of ἐστώς, δξύς, μέγας, πᾶς, ὅστις.
5. Write out in full: (1) imperf. indic. mid. of καθίημι; (2) 2d aor. imperat. mid. of μεθίστημι; (3) perf. indic. pass. of τέμνω.
6. Explain the cases in the following:
 - (α) ἡμᾶς ἀποστερεῖ τὸν μισθόν.
 - (β) ὑπισχνέεται αὐτοῖς ὀλίγων ἡμερῶν ἐκπλέων παρέσεσθαι.
 - (γ) εὖ ποιήσας ἀνθ' ὧν εὖ ἔπαθες.

Value: 1, 40; 2, 16; 3, 10; 4, 11; 5, 12; 6, 11.

Total Value, — 100.

φαινον
ον τὰ
πεὶ δὲ
ἀλλὰ
πρὸς
ἀγάλ-
ναίοισι

. 84.

θησαν.

their
Com-

ναῖς,
g. and

θήμι;
indic.

σθαι.



GRAMMAR SCHOOL.

GRAMMAR SCHOOL.

Latin.

Time, 2 hrs.

H. S. BRIDGES, M.A., Ph.D., Examiner.

N. B.—Candidates will select any four passages, but the passages selected must be from different authors.

Values

1. Translate into English :

Flumen est Arar, quod per fines Aeduarum et Sequanorum in Rhodanum influit incredibili lenitate, ita ut oculis in utram partem fluat judicari non possit. Id Helvetiis ratibus ac lintribus junctis transibant. Ubi per exploratores Caesar certior factus est tres jam partes copiarum Helvetios id flumen transduxisse, quartam vero partem citra flumen Ararim reliquam esse, de tertia vigilia cum legionibus tribus e castris profectus ad eam partem pervenit quae nondum flumen transierat. Eos impeditos et inopinantes adgressus magnam partem eorum concidit: reliqui sese fugae mandarunt atque in proximas silvas abdiderunt.

—Caes. Bell. Gall. I., Cap. 12.

Ubi prima impedimenta nostri exercitus ab his qui in silvis abditi latebant visa sunt, quod tempus inter eos committendi proelii convenerat, ita ut intra silvas aciem ordinesque constituerant atque ipsi sese confirmaverant, subito omnibus copiis provolaverunt impetumque in nostros equites fecerunt. His facile pulsus ac proturbatis incredibili celeritate ad flumen decucurrerunt ut paene uno tempore et ad silvas et in flumine et jam in manibus nostris hostes viderentur. Eadem autem celeritate adverso colle ad nostra castra atque eos qui in opere occupati erant contenderunt.

—Caes. Bell. Gall. II., Cap. 19.

Quo proelio bellum Venetorum totiusque orae maritimae confectum est. Nam quum omnis juvenus, omnes etiam gravioris aetatis, in quibus aliquid consilii aut dignitatis fuit, eo convenerant, tum navium quod ubique fuerat in unum locum coegerant; quibus amissis reliqui neque quo se reciperent neque quemadmodum oppida defenderent habebant. Itaque se suaque omnia Caesari dediderunt. In quos eo gravius Caesar vindicandum statuit, quo diligentius in reliquum tempus a barbaris jus legatorum conservaretur. Itaque omni senatu necato reliquos sub corona vendidit.

—Caes. Bell. Gall. III., Cap. 16.

His rebus pace confirmata post diem quantum quamvis in Britanniam ventum, naves xviii, de quibus supra demonstratum est, quae equites sustulerant, ex superiore portu leni vento solverunt. Quae quum appropinquarent Britanniae et ex castris viderentur, tanta tempestas subito coorta est ut nulla earum cursum tenere posset, sed aliae eodem unde erant profectae referrentur, aliae ad inferiorem partem insulae, quae est propius solis occasum, magno sui cum periculo dejicerentur; quae tamen ancoris jactis quum fluctibus complerentur; necessario adversa nocte in altum provectae continenter petierunt.

—Caes. Bell. Gall. IV., Cap. 28.

Aspice bis senos laetantis agmine cynos,
Aetheria quos lapsa plaga Jovis ales aperto
Turbabat caelo; nunc terras ordine longo
Aut capere aut captas jam despectare videntur:
Ut reduces illi ludunt stridentibus alis,
Et coetu cinxere polum, cantusque dedere,
Haud aliter puppesque tuae pubesque tuorum
Aut portum tenet, aut pleno subit ostia velo.
Perge modo, et, qua te ducit via, dirige gressum.

—Verg. Aen. I., Vv. 393-401.

Turrim in praecipiti stantem summisque sub astra
Eductam tectis, unde omnis Troia videri
Et Danaum solitae naves et Achaia castra,
Adgressi ferro circum, qua summa labantis
Juncturas tabulata dabant, convellimus altis
Sedibus, inpulimusque; ea lapsa repente ruinam
Cum sonitu trahit et Danaum super agmina late
Incidit. Ast alii subeunt, nec saxa, nec ullum
Telorum interea cessat genus.

—Verg. Aen. II., Vv. 460-468.

Values

Haud secus ac jussi faciunt, tectosque per herbam
Disponunt enses et scuta latentia condunt.
Ergo ubi delapsae sonitum per curva dedere
Litora, dat signum specula Misenus ab alta
Aere cavo. Invadunt socii et nova proelia temptant,
Obscenas pelagi ferro foedare volucres.
Sed neque vim plenis ullam nec volnera tergo
Accipiunt, celerique fuga sub sidera lapsae
Semiesam praedam et vestigia foeda relinquunt.

—Verg. Aen. III., Vv. 236-244.

Quo fessum rapitis, Fabii? tu Maxumus ille es,
Unus qui nobis cunctando restituis rem.
Exudent alii spirantia mollius aera,
Credo equidem, vivos ducent de marmore voltus,
Orabunt caussas melius, caelique meatus
Describent radio et surgentia sidera dicent:
Tu regere imperio populos, Romane, memento;
Hae tibi erunt artes; pacisque imponere morem,
Parcere subjectis, et debellare superbos.

—Verg. Aen. VI., Vv. 845-853.

Atque haec ut certis possemus discere signis,
Aestusque, pluviasque, et agentis frigora ventos,
Ipse Pater statuit, quid menstrua Luna moneret;
Quo signo caderent austri; quid saepe videntes
Agricolae propius stabulis armenta tenerent.
Continuo, ventis surgentibus, aut freta ponti
Incipiunt agitata tumescere et aridus altis
Montibus audiri fragor, aut resonantia longe
Litora misceri et nemorum increbescere murmur.

—Verg. Georg. I., Vv. 351-359.

His quidam signis atque haec exempla secuti
Esse apibus partem divinae mentis et haustus
Aetherios dixere; deum namque ire per omnis
Terrasque tractusque maris caelumque profundum;
Hinc pecudes, armenta, viros, genus omne ferarum,
Quemque sibi tenns nascentem arcessere vitas;
Scilicet huc reddi deinde ac resoluta referri
Omnia nec morti esse locum, sed viva volare
Sideris in numerum atque alto succedere caelo.

—Verg. Georg. IV., Vv. 219-227.

Huc ades, o formose puer : tibi lilia plenis
 Ecce ferunt Nymphae calathis ; tibi candida Nais,
 Pallentis violas et summa papavera carpens,
 Narcissum et florem jungit bene olentis anethi ;
 Tum, casia atque aliis intexens suavis herbis,
 Molli luteola pingit vaccinia caltha.
 Ipse ego cana legam tenera lanugine mala,
 Castaneasque nuces, mea quas Amaryllis amat ;
 Addam cerea pruna : honos erit huic quoque pomo.

—Verg. Eclog. II., Vv. 45-53.

Nunc intellego, si iste, quo intendit, in Manliana castra
 pervenerit, neminem tam stultum fore, qui non videat
 coniurationem esse factam, neminem tam improbum,
 qui non fateatur. Hoc autem uno interfecto intellego
 hanc rei publicae pestem paulisper reprimi, non in per-
 petuum comprimi posse. Quodsi se eiecerit secumque
 suos eduxerit et eodem ceteros undique collectos nau-
 fragos adgregaverit, extinguetur atque delebitur non
 modo haec tam adulta rei publicae pestis, verum etiam
 stirps ac semen malorum omnium.

—Cic. in Cat. I., Cap. 12.

Errant qui istas a Catilina expectant : meo beneficio
 tabulae novae proferentur, verum auctionariae ; neque
 enim isti, qui possessiones habent alia ratione ulla salvi
 esse possunt. Quod si maturius facere voluissent neque,
 id quod stultissimum est, certare cum usuris fructibus
 praediorum, et locupletioribus his et melioribus civibus
 uteremur. Sed hosce homines minime puto pertime-
 scendos, quod aut deduci de sententia possunt aut, si
 permanebunt, magis mihi videntur vota facturi contra
 rem publicam quam arma laturi.

—Cic. in Cat. II., Cap. 8.

Nihil me mutum potest delectare, nihil tacitum, nihil
 denique eius modi, quod etiam minus digni adsequi
 possint. Memoria vestra, Quirites, res nostrae alentur,
 sermonibus crescent, litterarum monumentis inveter-
 ascent et conroborentur ; eandemque diem intellego,
 quam spero aeternam fore, propagatam esse et ad salu-
 tem urbis et ad memoriam consulatus mei, unoque
 tempore in hac re publica duos cives exstitisse, quorum

Values

alter fines vestri imperii non terrae, sed caeli regionibus terminaret, alter eiusdem imperii domicilium sedesque servaret.

—Cic. in Cat. III., Cap. 11.

Si gladium quis apud te sana mente deposuerit, repetat insaniens, reddere peccatum sit, officium non reddere. —Quid? si is, qui apud te pecuniam deposuerit, bellum inferat patriae, reddasne depositum? Non, credo: facias enim contra rem publicam, quae debet esse carissima. Sic multa, quae honesta natura videntur esse, temporibus fiunt non honesta. Facere promissa, stare conventis, reddere deposita commutata utilitate fiunt non honesta. Ac de iis quidem, quae videntur esse utilitates contra justitiam simulatione prudentiae, satis arbitror dictum.

—Cic. De Off. III., Cap. 25., Sec. 94.

Epulabar igitur cum sodalibus omnino modice, sed erat quidam fervor aetatis, qua progrediente omnia fiunt in dies mitiora. Neque enim ipsorum conviviorum delectationem voluptatibus corporis magis quam coetu amicorum et sermonibus metiebar. Bene enim majores nostri accubitionem epularem amicorum, quia vitae conjunctionem haberet, convivium nominarunt; melius quam Graeci qui hoc idem tum compotationem, tum concoenationem vocant; ut quod in eo genere minimum est id maxime probare videantur.

—Cic. in De Senec., Cap. 13., Sec. 43.

Quare quis tandem me reprehendat, aut quis mihi jure succenseat, si, quantum ceteris ad suas res obeundas, quantum ad festos dies ludorum celebrandos quantum ad alias voluptates, et ad ipsam requiem animi et corporis conceditur temporum; quantum alii tribuunt tempestivis conviviis, quantum denique alveolo, quantum pilae, tantum mihi egomet ad haec studia recolenda sumpsero? Atque hoc adeo mihi concedendum est magis, quod ex his studiis haec quoque crescit oratio et facultas; quae quantacumque in me est, nunquam amicorum periculis defuit.

Cic. Pro. Arch., Cap. 6, Sec. 13.

Tum Africanus: Sentio (inquit) te sedem etiam nunc hominum ac domum contemplari. Quae si tibi parva, ut est, ita videtur, haec caelestia semper spec-

tato, illa humana contemnito. Tu enim quam celebritatem sermonis hominum aut quam expetendam gloriam consequi potes? Vides habitari in terra raris et angustis in locis, et in ipsis quasi maculis ubi habitatur vastas solitudines interiectas, eosque qui incolunt terram non modo interruptos ita esse ut nihil inter ipsos ab aliis ad alios manare possit, sed partim obliquos, partim transversos, partim etiam adversos stare vobis, a quibus expectare gloriam certe nullam potestis.

—Cic. Som. Scip., Cap. 6.

Quis desiderio sit pudor aut modus
Tam cari capitis? Praecepit lugubres
Cantus, Melpomene, cui liquidam pater

Vocem cum cithara dedit.

Ergo Quinctilium perpetuus sopor
Urget! cui Pudor et Justitiae seror
Incorrupta Fides nudaque Veritas

Quando ullum inveniet parem?

Multis ille bonis flebilis occidit,

Nulli flebilior quam tibi, Virgili.

Tu frustra pius heu non ita creditum

Poscis Quinctilium deos.

—Hor. Odes I., Ode 24, Vv. 1-12.

Quamquam nec Calabrae mella ferunt apes
Nec Laëstrygonia Bacchus in amphora

Languescit mihi nec pingua Gallicis

Crescunt vellera pascuis,

Importuna tamen pauperies abest,

Nec si plura velim tu dare deneges.

Contracto melius parva cupidine

Vectigalia porrigam,

Quam si Mygdoniis regnum Alyattei

Campis continuem. Multa petentibus

Desunt multa: bene est cui deus obtulit

Parca quod satis est manu.

—Hor. Odes III., Ode 16, Vv. 33-44.

Ad quartam jaceo; post hanc vagor; aut ego, lecto

Aut scripto quod me tacitum juvet, ungor olivo,

Non quo fraudatis immundus Natta lucernis.

Ast ubi me fessum sol acrior ire lavatum

Admonuit fugio Campum lusumque trigonem.

Pransus non avide, quantum interpellet inani

 Values

Ventre diem durare, domesticus otior. Haec est
 Vita solutorum misera ambitione gravique;
 His me consolor victurum suavius ac si
 Quaestor avus pater atque meus patruusque fuisset.

—Hor. Sat. I., Sat. 6, Vv. 122-131.

Quidquid praecipies esto brevis, ut cito dicta
 Percipiant animi dociles teneantque fideles;
 Omne supervacuum pleno de pectore manat.
 Ficta voluptatis causa sint proxima veris,
 Nec quodcumque volet poscat sibi fabula credi,
 Neu pransae Lamiae vivum puerum extrahat alvo.
 Centuriae seniorum agitant expertia frugis,
 Celsi praetereunt austera poemata Ramnes:
 Omne tulit punctum qui miscuit utile dulci,
 Lectorem delectando pariterque monendo.

—Hor. Ars Poetica, Vv. 335-344.

Nil erit ulterius, quod nostris moribus addat
 Posteritas: eadem facient cupientque minores.
 Omne in praecipiti vitium stetit: utere velis,
 Totos pande sinus! Dicis hic forsitan: Unde
 Ingenium par materiae? unde illa priorum
 Tribendi quodcumque animo flagrante liberet
 Simplicitas, cuius non audeo dicere nomen?
 Quid refert dictis ignoscat Mucius an non?
 Pone Tigellinum: taeda lucebis in illa,
 Qua stantes ardent, qui fixo pectore fumant,
 Et latum media sulcum deducis arena. —

—Juv. Sat. I., Vv. 147-157.

Pars magna Italiae est, si verum admittimus, in qua
 Nemo togam sumit, nisi mortuus. Ipsa dierum
 Festorum herboso colitur si quando theatro
 Maestas, tandemque redit ad pulpita notum
 Exodium, quum personae pallentis hiatum
 In gremio matris formidat rusticus infans:
 Aequales habitus illic similesque videbis
 Orchestræ et populum; clari velamen honoris
 Sufficiunt tunicæ summis aedilibus albae.
 Hic ultra vires habitus nitor; hic aliquid plus
 Quam satis est interdum aliena sumitur arca.

—Juv. Sat. III., Vv., 171-181.

Values

Nemo magis rhombum stupuit : nam plurima dixit
 In laevum conversus ; at illi dextra iacebat
 Bellua. Sic pugnas Cilicis laudabat et ictus
 Et pegma et pueros inde ad velaria raptos.
 Non cedit Veiento, sed ut fanaticus oestro
 Percussus, Bellona, tuo divinat et, Ingens
 Omen habes, inquit, magni clarique triumphi :
 Regem aliquem capies, aut de temone Britanno
 Excidet Arviragus : peregrina est bellua ; cernis
 Erectas in terga sudes ? — Hoc defuit unum
 Fabricio, patriam ut rhombi memoraret et annos.

Juv. Sat. IV., Vv., 118-129.

Si vis tu fieri, nullus tibi parvulus aula
 Luserit Aeneas nec filia dulcior illo :
 Iucundum et carum sterilis facit uxor amicum.
 Sed tua nunc Mygale pariat licet et pueros tres
 In gremium patris fundat simul : ipse loquaci
 Gaudebit nido, viridem thoraca iubebit
 Afferri minimasque nuces assemque rogatum,
 Ad mensam quoties parasitus venerit infans. —
 Vilibus ancipites fungi ponentur amicis,
 Boletus domino ; sed quales Claudius edit
 Ante illum uxoris, post quem nil amplius edit.

—Juv. Sat. V., Vv., 138-148.

Fidimus eloquio ? Ciceroni nemo ducentos
 Nunc dederit nummos, nisi fulserit annulus ingens.
 Respicit haec primum, qui litigat, an tibi servi
 Octo, decem comites, an post te sella, togati
 Ante pedes. Ideo conducta Paulus agebat
 Sardonyche, atque ideo plaris quam Gallus agebat,
 Quam Basilus. Rara in tenui facundia panno.
 Quando licet Basilo flentem producere matrem ?
 Quis bene dicentem Basilum ferat ? accipiat te
 Gallia vel potius nutricula causicorum
 Africa, si placuit mercedem ponere linguae.

—Juv. Sat. VII., Vv., 139-149.

Quod modo proposui, non est sententia ; verum est ;
 Credite me vobis folium recitare Sibyllae.
 Si tibi sancta cohors comitum, si nemo tribunal
 Vendit acersecomes, si nullum in coniuge crimen,
 Nec per conventus et cuncta per oppida curvis
 Unguibus ire parat nummos raptura Celaeno :
 Tu licet a Pico numeres genus, altaque si te

Values

Nomina delectant, omnem Titanida pugnam
Inter maiores ipsumque Promethea ponas :
De quocumque voles proavum tibi sumito libro.

—Juv. Sat. VIII., Vv., 125-134.

Insignem illa die virum Sempronium Densum aetas nostra vidit. Centurio is praetoriae cohortis, a Galba custodiae Pisonis additus, stricto pugione occurrens armatis et scelus exprobrans ac modo manu modo voce vertendo in se percusso es quanquam vulnerato Pisoni effugium dedit. Piso in aedem Vestae pervasit exceptusque misericordia publici servi et contubernio eius additus non religione nec caerimoniis sed latebra imminens exitum differebat, cum advenere missu Othonis nominatim in caedem eius ardentis Sulpicius Florus et Britannicis cohortibus, nuper a Galba civitate donatus, et Statius Mureus speculator, a quibus protractus Piso in foribus templi trucidatur.

—Tac. Hist., Bks. I., Cap. 43.

At Romae, nondum cognito qui fuisset exitus in Illyrico, et legionum Germanicarum motu audito, trepida civitas incusare Tiberium quod, dum patres et plebem, invalida et inermia cunctatione ficta ludificetur, dissideat interim miles neque duorum adolescentium nondum adulta auctoritate comprimi queat. Ire ipsum et opponere maiestatem imperatoriam debuisse cessuris, ubi principem longa experientia eundemque severitatis et munificentiae summum vidissent. An Augustum fessa aetate totiens in Germanius commeari potuisse : Tiberium vigentem annis sedere in senatu, verba patrum cavillantem ? Satis prospectum urbanae servituti ; militaribus animis adhibenda fomenta, ut ferre pacem velint.

—Tac. Ann. Bk. I., Cap. 46.

Ibi omnia ab sociis inquisita cum cura ac fide cognita : praeoccupatos iam ante ab Hannibale Gallorum animos esse ; sed ne illi quidem ipsi satis mitem gentem fore (adeo ferocia atque indomita ingenia esse), ni subinde auro, cuius avidissima gens est, principum animi concilientur. Ita peragratis Hispaniae et Galliae populis, legati Romam redeunt haud ita multo post,

quam consules in provincias profecti erant. Civitatem omnem expectatione belli erectam invenerunt, satis constante fama, iam, Hiberum Poenos transmisisse.

—Livy, Bk. XXI., Cap. 20.

¹Fuere, ea tempestate, qui dicerent 'Catilinam, oratione habita, quum ad iusjurandum populares sceleris sui adigeret, humani corporis sanguinem vino permixtum in pateris circumtulisse; inde, quum ² post execrationem omnes degustavissent, sicuti in solemnibus sacris fieri consuevit, aperuisse consilium suum; atque eo, dictitare, fecisse, quo inter se magis fidi forent, alius alii tanti facinoris conscii.' Nonnulli ficta et haec et multa praeterea existimabant ab iis, qui ³ Ciceronis invidiam, quae postea orta est, leniri credebant atrocitate sceleris eorum, qui poenas dederant. Nobis ea res ⁴ pro magnitudine parum comperta est.

—Sallust. Catil., Cap. 22.

Hoc etiam faciunt ubi discubuerunt tenentque
 Pocula saepe homines et innumbrant ora coronis,
 Ex animo ut dicant 'brevis hic est fructus hominibus;
 Iam fuerit neque post unquam revocare licebit.'
 Tamquam in morte mali cum primis hoc sit eorum,
 Quod sitis exurat miseros atque arida torres,
 Aut aliae cuius desiderium insideat rei.
 Nec sibi enim quisquam tum se vitamque requirit,
 Cum pariter mens et corpus sopita quiescunt;
 Nam licet aeternum per nos sic esse soporem,
 Nec desiderium nostri nos adficit ullum.

—Lucretius, De Rer. Nat. III., Vv 912-922.

Quintiliane, vagae moderator summe iuventae,
 Gloria Romanae, Quintiliane, togae,
 Vivere quod propero pauper nec inutilis annis,
 Da veniam: properat vivere nemo satis.
 Differat hoc, patrios optat qui vincere census
 Atriaque immodicis artat imaginibus.
 Me focus et nigros non indignantia fumos
 Tecta iuvant et fons vivus et herba rudis.
 Sit mihi verna satur, sit non doctissima coniunx,
 Sit nox cum somno, sit sine lite dies.

—Mart. Epigram. Lib. II., Epigram XXIV.

Values

Ego vero hinc abeo, quando is, quamobrem huc veneram,
 Rus abiit : illum curo unum : ille ad me attinet.
 Quando ita volt frater, de istoc ipse viderit.
 Sed quis illic est, procul quem video ? estne hic Hegio,
 Tribulis noster ? si satis cerno, is hercle 'st : vah !
 Homo amicus nobis jam inde a puero. Dii boni !
 Nae illiusmodi jam nobis magna civium
 Penuria 'st : horro antiqua virtute, ac fide.
 Haud cito mali quid ortum ex hoc sit publice.
 Quam gaudeo, ubi etiam hujus generis reliquias
 Restare video ! vah ! vivere etiam nunc lubet.
 Opperiar hominem hic, ut salutem, et colloquar.

—Ter. Adolph. Act. III., Scen. III., Vv. 81-92.

2. Parse : revinxit, solutae, euntis, attingit, hausit, petamus, sparsa, erepta.
3. Construct Latin sentences to show the cases governed by the verbs : celo, taedet, vescor, obliviscor.
4. Express in Latin : We must fight for our country. They could not speak for joy. They bought this for a large sum. He set out for Rome. In the consulship of Pompey and Crassus. Sixty years old.
5. Explain what is meant by the terms Calendae, Nonae, and Idus. Write the Latin for : June 10th, May 24th, March 14th.
6. What are the regular Latin forms of the following conditional sentences ? (Use rogo and respondeo.)
 - (a) If you had asked me, I should have answered.
 - (b) If you ask me, I shall answer.
 - (c) If you ask me, I should answer.
 - (d) If you were to ask me, I should answer.

GR. SCHOOL.

Greek and Roman History. *Time, 1 hr. 45 min.*

H. S. BRIDGES, M. A., Ph. D., Examiner.

1. Between whom was the Battle of Marathon fought? Give the date and result. Where is Marathon situated?
2. Give the date of the Confederacy of Delos. How long did Athens retain the position in which it placed her, and how did she lose it?
3. Give a brief account of the affair of Sphacteria, and state the date.
4. Where are Salamis, Aegospotami, Leuctra? With what events are they connected? Give dates.
5. Narrate briefly the rise of the Thirty at Athens.
6. What are the religious institutions attributed to Numa Pompilius?
7. Mention two important measures effected by Spurius Cassius. Give the circumstances of his death.
8. What was the immediate cause of the Second Punic War? Give the dates of the battles of the Trebia, Lake Trasimenus and Cannae. What were the results of each battle?
9. State briefly what you know concerning *any one* of the following: Regulus, Pompey, Sulla, Tiberius Gracchus, Coriolanus.
10. What were the duties of the Censors? How often were they elected, and how long did they continue in office?

N. B.—Eight questions make a full paper. Take any four in Roman History and any four in Greek History.

GRAMMAR SCHOOL.

Time, 1 hr. 30 min.

Plane and Spherical Trigonometry.

THOMAS HARRISON, M.A., LL.D., Examiner.

Values

16

1. The whole Science of Plane Trigonometry is based on the following formulæ :

$$(1) \sin(x+y) = \sin x \cos y + \cos x \sin y$$

$$(2) \sin(x-y) = \sin x \cos y - \cos x \sin y$$

$$(3) \cos(x+y) = \cos x \cos y - \sin x \sin y$$

$$(4) \cos(x-y) = \cos x \cos y + \sin x \sin y$$

Prove *one* of them analytically and Synthetically.

16

2. By adding (1) and (2)

$$\text{Prove } \sin S + \sin T = 2 \sin \frac{S+T}{2} \cos \frac{S-T}{2}.$$

What formulæ may be obtained by subtracting (2) from (1), by adding (3) and (4), by subtracting (4) from (3), by dividing (1) by (3), by dividing (2) by (4) ?

16

3. Draw the necessary figure for proving the relations between the sides and angles of a right spherical triangle. Write out the ten formulæ by the aid of Napier's Rules, and prove any five of them.

16

4. In an oblique spherical triangle prove

$$\cos a = \cos b \cos c + \sin b \sin c \cos A.$$

16

5. Explain every step in the process of proving

$$\cos(b-c) - \cos a = \sin(s-b) \sin(s-c).$$

20

6. What values could be substituted for

$$\cos \frac{1}{2} A \cos \frac{1}{2} B - \sin \frac{1}{2} A \sin \frac{1}{2} B \text{ in a spherical triangle whose sides are } a, b, \text{ and } c?$$

Show that it is equal to

$$\frac{(\sin s - \sin(s-c))}{\sin c} \times \sqrt{\frac{\sin(s-a) \sin(s-b)}{\sin a \sin b}}.$$

GRAM. SCHOOL.

Plane and Solid Geometry. *Time, 1 hr. 30 min.*

1. If the ratio of a to b is equal to the ratio of c to d , prove that either of these ratios is equal to the ratio of $a+b$ to $c+d$.
2. What is Euclid's definition of proportion between four magnitudes? What propositions in the Sixth Book are the best commentaries on this definition? Indicate the line of proof in either one.
3. What propositions of the Sixth Book involve the consideration of duplicate ratio? Why is it that when three lines are in continued proportion the first is to the third as any rectilineal figure on the first is to a similar and similarly described figure on the second?
4. If a perpendicular be let fall from the right angle upon the hypotenuse, show that by considering the three similar right-angled triangles we have three lines which are mean proportionals between certain extremes.
5. To describe a rectilineal figure which shall be similar to one and equal to another given rectilineal figure.
6. If two straight lines are parallel and one of them is perpendicular to a plane the other will be perpendicular: Prove this and state and prove the converse.
7. If two straight lines are cut by three parallel planes they will be cut proportionally.
8. What is meant by the inclination of a line to a plane? What by the inclination of a plane to a plane? Show by a diagram in each case.

GRAM. SCHOOL.

Algebra.

Time, 1 hr. 30 min.

Values	1. If	$\frac{a}{1}x + \frac{b}{1}y + \frac{c}{1} = 0$
15	and	$\frac{a}{2}x + \frac{b}{2}y + \frac{c}{2} = 0$
	and	$\frac{a}{3}x + \frac{b}{3}y + \frac{c}{3} = 0$
	Find the values of x and y from the first two, substitute them in the third and clear of fractions the result.	
20	2. If	$\frac{a}{1}x + \frac{b}{1}y + \frac{c}{1}z + \frac{d}{1} = 0$
	and	$\frac{a}{2}x + \frac{b}{2}y + \frac{c}{2}z + \frac{d}{2} = 0$
	and	$\frac{a}{3}x + \frac{b}{3}y + \frac{c}{3}z + \frac{d}{3} = 0$
	Find the value of x .	
10	3. If	$\frac{a^2y^2}{b^2} + \frac{b^2x^2}{a^2} = d^2$
	and	$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$, Prove $d^2 = a^2 - \frac{a^2-b^2}{a^2} \cdot x^2$
	If	$x^2 + y^2 = l^2$ and $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$, prove $l^2 = b^2 + \frac{a^2-b^2}{a^2} \cdot x^2$
15	4. If	$\frac{x \cdot f}{a^2} + \frac{y \cdot g}{b^2} = 0$ and $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$
	Find x and y and simplify the result when given that	
	$\frac{f^2}{a^2} + \frac{g^2}{b^2} = 1$	
10	5. Expand	$\left(1 + \frac{1}{z}\right)^z$ by the Binomial Theorem.
10	6. Expand	$\left(1 + \frac{1}{z}\right)^{xz}$ by the Binomial Theorem.
20	7. What does the expansion of question (5) become when z is infinite? What is the expansion then called? What does the expansion of question (6) become when z is infinite? How then do you prove the Exponential Theorem?	
100		

GRAM. SCHOOL.

Chemistry.*Time, 1 hr. 45 min.*

PROF. L. W. BAILEY, PH.D., LL.D., Examiner.

Six questions make a full paper.

1. From what sources are the following acids derived, and how? Sulphuric, Nitric, Carbonic. Name and formulate some of their chief salts, and state to what uses they may be applied.
2. How would you proceed to prepare free Chlorine, Ozone, Nitrogen, Nitrogen di-oxide, Sulphur dioxide. Formulate the reactions in each case.
3. Compare, as to heat and light effects, the following cases of combustion. H in air, H in O, P in O, a candle flame, a Bunsen flame, PH_3 , CS_2 .
4. What are possible sources of CO_2 in the air? Why is its amount approximately uniform? Enumerate some of the results which follow from its presence.
5. Give graphic symbols for the following: Sodid hydrate, Calcium carbonate, Ammonium sulphate, Potassium chlorate, Copper Nitrate, Nitrous anhydride, Calcium hydrate.
6. "Avogadro's Law is the foundation of modern Chemistry." Give reasons for this statement.
7. Explain, with illustrations, the terms Valence, Positive Radical, Allotropic, Monobasic, Electrolysis, Reduction.
8. How much HCl must you use to obtain from it 12 gr. of H? Explain fully the reasoning on which your result is based.

GRAM. SCHOOL.

History of Education.*Time, 1½ hrs.*

G. U. HAY, PH.B., M.A., Examiner.

Six questions only to be answered.

1. (a) Contrast the Greek and Roman ideals of Training.
(b) Sketch the opinions of Cato and Cicero with respect to these ideals.
2. (a) What is the "Study of the Humanities?"
(b) Give some account of Sturm's System.
3. (a) "Children," says Comenius, "must not be forced to study against their will." Give some account of his methods.
(b) What do you think of his methods?
4. (a) Who was Montaigne?
(b) To what school did he belong?
(c) Contrast it with the Realists and Humanists, and mention any defects of these two.
5. (a) Who was the author of the "Schoolmaster?"
(b) Give a brief sketch of how the work came to be written and its scope.
6. Give the substance of Milton's ideas on Education.
7. What are the excellences and defects of Locke's "Thoughts on Education?"
8. (a) What is Rousseau's ideal of the education of woman? (b) What is yours?
9. (a) Outline Pestalozzi's scheme of Education as given in "Leonard and Gertrude."
(b) What is the leading thought in Herbart's Scheme of Education?
10. State what writer or theory has most impressed you in your study of the History of Education, and why?

GRAM. SCHOOL.

Physics.*Time, 1 hr. 30 min.*

PROF. S. M. DIXON, M.A., Examiner.

1. Explain the principle of the Hydrostatic Press, and make a sketch to show the method of working.
2. State Newton's three laws of motion.
3. A bar 12 feet long carries weights of 5 lbs. and 16 lbs. respectively at each end. Find the point about which the bar will balance.
4. What is the specific heat of a body? How can it be measured?
5. Describe an experiment to show how various substances differ in their power of conducting heat.
6. Describe fully any voltaic cell, explaining the use of each part.
7. Define magnetic declination, dip, isogonic curves.

Only *six* questions to be attempted.

GRAMMAR SCHOOL AND CLASS I.

GR. SCH. AND CLASS I.

School System.*Time 1 hour.*

Values

G. W. MERSEREAU, M. A., Examiner.

- | | |
|----|--|
| 15 | 1. Detail the means provided to insure School instruction to all pupils of School age in the Province in spite of the indifference and even against the wishes of majorities. |
| 10 | 2. County School Fund. Show clearly how it is (1) <i>raised</i> , and (2) <i>distributed</i> . |
| 10 | 3. What provision is made for instruction in the nature and effects of Stimulants and Narcotics? |
| 10 | 4. What legal qualification must a teacher possess before contracting to teach, and what items must his contract contain? |
| 13 | 5. If a person offering to vote at a School meeting is challenged, what course must be pursued in order that his vote may be received? |
| 15 | 6. Name <i>five</i> School officers and specify their duties. |
| 15 | 7. Under what conditions can (a) prizes be given in Schools; (b) Local Superintendents be appointed, and (c) a teacher be dismissed during his term of employment? |
| 12 | 8. (a) Name three necessary qualifications of a voter at a School meeting. (b) State <i>two</i> ways in which an occasional vacancy in the trusteeship may be filled. (c) State the <i>longest</i> and <i>shortest</i> time for which a teacher can make an agreement, except to fill out an unexpired term. (d) If a teacher is absent from School without consent of Trustees, what is the effect upon his contract? |

GR. SCHOOL AND CLASS I.

Time, 1 hr.

Industrial Drawing.

MR. J. VROOM, Examiner.

NOTE.—*Freehand work throughout. Knowledge, design and execution will be valued in your answer; and to obtain full credit for the latter the drawings must be not less than four inches in width.*

Values

20

1. Draw three interlacing circles; or,

A section of a scroll border, illustrating the use of half-tint.

40

2. Sketch from memory or from the object any familiar bud, flower, fruit or leaf, and from your sketch draw a conventional form suitable for line or color decoration on a flat surface. Name the plant form you select, and state the particular use you have in mind.

40

3. Make a finished drawing of the end of a tube or hollow cylinder, cut at right angles to its axis, and seen with the axis oblique to the line of vision—internal and external diameters in the proportion of 3 to 4—solidity and curvature expressed by shading; or,

Draw the group of objects placed before you, with due attention to shading and perspective.

100

GR. SCH. AND CLASS I.

Botany.*Time, 1 hr. 45 min.*

PROF. L. W. BAILEY, PH.D., LL.D., Examiner.

PART I.

1 hr. without text.

1. How would you demonstrate, experimentally, that oxygen is evolved by growing plants? Which maintain a higher internal temperature during life, plants or animals? Account for the fact.
2. Mention three native plants bearing illustrations of each of the following: Open carpels, gamopetalous corolla, inferior ovary, irregular corolla, stamens inserted on calyx, dicecious flowers, deciduous leaves.
3. What forms of modified branches and of modified leaves do you find on the plant upon your desk? Give the special function of each.
4. Write a description, or tabular analysis, of the plant before you, complete as to its visible parts.
5. Give separately the serial, class, sub-class, family and generic characters of the before-mentioned plant.

PART II.

45 min. with text.

6. Determine the series, class, sub-class, order, family, genus, and species of the plant you have just examined, writing out, as in the text, every line leading to its exact determination. Give also its botanical name in full.

GRAMMAR SCHOOL AND CLASS I.

*Time, 1 hr. 45 min.***Physiology and Hygiene.**

PROF. L. W. BAILEY, Ph.D., LL.D., Examiner.

Five questions make a full paper.

1. How is bone made up, first chemically, and second, anatomically? In each case explain the relation of structure to use.
2. Explain the use of each of the following: Ligaments, Tendons, Synovia, Periosteum, Dentine, Epiglottis, Pylorus, Lacteals, Aorta, Bronchi.
3. Explain the three classes of muscular leverage, illustrating each by example.
4. Classify the principal kinds of foods, stating where and how each is disposed of in the nutrition of the body. What part do water, salt, milk and alcohol respectively take as articles of food?
5. Sketch, as upon a black board, the disposition of the principal internal organs, indicating each by name.
6. Explain, with aid of diagrams, the structure of any one organ of special sense.

Teaching and School Management.

GR. SCH. AND CLASS I.

Time, 2 hrs.

G. U. HAY, Ph.B., M.A., Examiner.

Values	
10	1. What are the advantages of a knowledge of Psychology to teachers?
15	2. (a) How may morality be taught indirectly in School lessons? (b) Illustrate by History or any other subject.
10	3. What methods would you adopt to stimulate dull pupils?
15	4. (a) What conditions determine the amount of home lessons? (b) What subjects would you give for home lessons, and why?
10	5. State some of the advantages of written examinations.
10	6. How do you propose to teach your pupils to love their country?
15	7. (a) What is the chief object of Nature Lessons? (b) Give an outline of how you would teach a lesson on a common plant.
17	8. The formation of character is most important in education. State concisely how you would act and teach with that end in view.
100	

SUPERIOR SCHOOL.

SUPERIOR SCHOOL.

Latin.

Time, 1 hr. 30 min.

H. S. BRIDGES, M.A., Ph.D., Examiner.

1. Translate into English :

Quod non fore dicto audientes neque signa laturos dicantur, nihil se ea re commoveri ; scire enim quibuscunque exercitus dicto audiens non fuerit, aut male re gesta fortunam defuisse, aut aliquo facinore comperto avaritiam esse convictam : suam innocentiam perpetua vita, felicitatem Helvetiorum bello esse perspectam. Itaque se quod in longiorem diem collaturus fuisset, repraesentaturum et proxima nocte de quarta vigilia castra moturum, ut quam primum intelligere posset, utrum apud eos pudor atque officium an timor valeret. Quod si praeterea memo sequatur, tamen se cum sola decima legione iturum de qua non dubicaret, sibi que eam praetoriam cohortem ferre. Huic legioni Caesar et indulserat praecipue et propter virtutem confidebat maxime.

—Caes. De Bell. Gall., Bk. I., Cap. 40.

2. Parse : dicto, comperto, collaturus, sequatur, iturum, posset.
3. Decline throughout the sing. only : iter, facinus, salus, manus, perniciēs, jus.
4. Write down in full : (1) Imperf. subj. of *adeo* ; (2) pres. subj. pass. of *facio* ; (3) perf. subj. pass. of *fero* ; (4) imperf. subj. of *prosum*.
5. Give the principal parts of : *refero*, *negligo*, *laccio*, *audeo*, *vinco*, *sumo*, *maneo*, *quaero*, *mitto*, *reperio*.
6. Translate the following sentence literally, and explain the construction of the underlined words :

Is, *se praesente*, de se ter sortibus *consultum* dicebat, utrum *igni* statim necaretur, an in aliud tempus reservaretur : sortium *beneficio* se esse incolumem.

SUP. SCHOOL CLASS. **Practical Mathematics.** *Time, 1 hr. 30 min.*

STEPHEN M. DIXON, M.A., Examiner.

Values	
15	1. The sides of a triangular field are 5.30 chs., 3 chs., and 4.31 chs. respectively. Find its area.
15	2. A circle is inscribed in a square whose side is 30 inches. Find its area, and also the side of an equilateral triangle of equal area.
10	3. Find the diameters of two equal iron rods whose total cross section equals $3\frac{1}{2}$ sq. inches.
20	4. A circular race track is 30 feet wide, and the inner radius is 300 feet, find the total area of the track.
20	5. If the driving wheel of a locomotive is 6 feet in diameter, how many revolutions must it make to cover 10 miles?
20	6. The diagonal of a square field is 13.29 chains, find its area in acres.
100	

CLASS I.

CLASS I.

English Language.*Time, 1 hr. 30 min.*

H. S. BRIDGES, M.A., Ph.D., Examiner.

1. What is the rule for the agreement of the relative and antecedent? When may *as* and *but* be considered relatives? Give examples.
2. Define the following: *root, stem, derivatives, hybrids*. What is the difference between *inseparable* and *separable* prefixes? Give three instances of each kind.
3. Write a brief philological note on each of the following words: *sexton, proxy, tawdry, protean, bustard, custard, surgeon*.
4. The Keltic element in English is of three kinds. Specify them, and give examples of the second kind.
5. Give the general and detailed analysis of the following:

"For when the noble Caesar saw him *stab*,
Ingratitude, more strong than traitors' arms,
Quite vanquished him: then *burst* his mighty heart,
And in his mantle muffling *up* his face,
Even at the base of Pompey's statua,
Which all the while ran blood, great Caesar fell."
6. Parse the words in italics in the passage for analysis.
7. Distinguish between *rhyme* and *rhythm*. What conditions are essential to good rhyme?

CLASS I.

English Literature.*Time, 1 hr. 30 min.*

H. S. BRIDGES, M.A., Ph. D., Examiner.

1. What was the nature of Henry V.'s claim to the throne of France? What special motive had he in asserting it at the commencement of his reign?
2. Explain the following phrases: This wooden O; we speak upon our cue; that nook-shotten isle; Parca's fatal web; whiffler 'fore the king; the farced title; a charter'd libertine; crescive in his faculty?
3. Explain the allusions in these passages:
 - (a) The law Salique that they have in France.
 - (b) This day is called the Feast of Crispian.
 - (c) The Gordian-knot of it he will unloose.
 - (d) The Emperor's coming in behalf of France.
4. In what connection do the following occur? Name the speaker. Give the next line:
 - (a) Silken dalliance in the wardrobe lies.
 - (b) The gates of mercy shall be all shut up.
 - (c) Big Mars seems bankrupt in their beggar'd host.
5. Give a brief sketch of the character of Fluellen.
6. When was the Fourth Canto of Childe Harold's Pilgrimage published? To whom was it dedicated? State briefly your conception of the purpose of the poem.
7. Explain the allusions in the following:
 - (a) She looks a sea Cybele, fresh from ocean.
 - (b) When Athens' armies fell at Syracuse,
And fetter'd thousands bore the yoke of war
Redemption rose up in the Attic Muse.
 - (c) The promontory whence the Traitor's Leap
Cured all ambition.
 - (d) The southern Scott, the minstrel who called forth
A new creation with his magic line.
8. Quote the stanza beginning with the line:
"There is a pleasure in the pathless woods."

N. B.—Candidates are allowed an option between questions (4) and (5).

CLASS I.

Geometry.*Time, 1 hr. 30 min.*

Values

THOMAS HARRISON, M.A., LL. D., Examiner.

- | | |
|-----|---|
| 10 | 1. Apply the method of analysis to determine the point in a given straight line such that the lines joining it with two given points on the same side of the line shall make equal angles with the line. |
| 15 | 2. Prove that the sum of the squares on any two sides of a triangle is equal to twice the square of half the third side plus twice the square of the line joining the middle point of the third side with the vertex of the opposite angle. |
| 15 | 3. If the base of a triangle is fixed on magnitude and position, if also the sum of the squares of the other two sides is always the same, apply the preceding proposition to find the locus of the vertex. |
| 15 | 4. Given the base of a triangle fixed and the difference of the squares of the other two sides a constant quantity, find the locus of the vertex. |
| 10 | 5. Shew how to get the centres and radius of the inscribed, circumscribed and escribed circles to a given triangle. How many escribed circles will there be? |
| 15 | 6. To inscribe a regular pentagon in a given circle. |
| 20 | 7. If four straight lines be proportionals the similar rectilineal figures similarly described upon them must also be proportionals. |
| 100 | |

CLASS I.

Physics and Chemistry. *Time, 1 hr. 45 min.*

PROF. L. W. BAILEY, Ph.D., LL.D., Examiner.

(Six questions make a full paper.)

1. Show how much water a floating body displaces. Explain why vessels, such as iron ships, made of materials of high specific gravity, will float upon water.
2. Explain the action of the siphon and demonstrate its limitations.
3. Two weights, of 30 lbs. and 80 lbs. respectively, are fastened to the ends of a bar 20 feet long. Show where the power must be applied so that when it raises the bar, the weights will be in equilibrium.
4. Mention four solid compounds which will undergo chemical changes when left exposed out of doors, and write the reactions which they would, severally, be liable to undergo.
5. Deduce and write the reaction between black oxide of manganese and hydrochloric acid (in hot aqueous solution.)
6. (a) Formulate, graphically, sulphuric, nitric, muriatic, phosphoric, and carbonic acid.
(b) Which of these acids gives rise to the most stable salts? Which to the least stable ones? Give proofs.
7. Give examples, from your own observation, of (a) physical processes, and (b) chemical changes, which are effective in converting solid rocks into fertile soils? Give the composition and distinctive properties of four minerals which are particularly liable to chemical changes.

CLASS I.

General History.*Time, 1 hr. 30 min.*

PROF. L. W. BAILEY, LL.D., Examiner.

Six questions make a full paper.

1. To what extent and in what directions did civilization develop itself among the ancient Egyptians?
2. The Aryan race has been described as the "Race of Progress." Illustrate this statement.
3. Explain the part played by the Phenicians as early explorers and colonists.
4. What was the distinctive feature of Spartan education and its results?
5. Explain the connection between the histories of Persia and of Greece, with its consequences.
6. In which several ways was human progress especially affected by the following: Career of Julius Caesar, Age of Augustus, Life of Charlemagne, Feudalism, Chivalry, the Crusades, Age of Elizabeth.
7. Explain the part played in history by any two of the following personages: Alexander, Pompey, Mahomed, Nero, Hannibal, Charles V. of Spain, Cardinal Wolsey.

CLASS I.

Algebra.

Time, 1 hr. 30 min.

THOMAS HARRISON, M. A., LL. D., Examiner.

Values

- | | |
|----|---|
| 10 | 1. Given $a^2 = b^2 + c^2 - 2cx$.
Find the value of x then of $b+x$ and of $b-x$ and prove that
$b^2 - x^2 = \frac{(a+b+c)(b+c-a)(c+a-b)(a+b-c)}{4c^2}$ |
| 10 | 2. In the above equation if $b^2 - x^2 = p^2$ and if $a+b+c=s$ find the value of $4c^2p^2$ |
| 15 | 3. If $ax+by+cz=0$
and $a'x+b'y+c'z=0$

Prove $\frac{x}{bc'-b'c} = \frac{y}{ca'-c'a} = \frac{z}{ab'-a'b}$ by eliminating y and z alternately. |
| 15 | 4. If $2x+3y-5z=0$

and $x-2y+4z=0$. Prove that $\frac{x}{A} = \frac{y}{B} = \frac{z}{C}$ giving at the same time the true values of A , B , and C . |
| 10 | 5. Simplify $\sqrt{8}+3\sqrt{2}-\sqrt{50}$.

Rationalize the denominator of $\frac{1}{2-\sqrt{3}}$ and having done this find to three decimal places the value of the fraction. |
| 20 | 6. Give every step in the solution of $ax^2+bx+c=0$. Why is the solution of this equation of special importance? What is the value of each root separately? What is the sum of the two roots? What is their product equal to? When will they be equal to each other? |
| 20 | 7. Explain how the theory of combinations comes in to enable you to find the partial products that together make up the total product of n equal factors of the form $(a+b)$
What is the Total product? |

100

CLASS I. AND II.

CLASS I. and II.

Domestic Economy.*Time, 1½ hrs.*

THEORY.

1. Give directions for *one* of the following : (a) Roasting a joint of meat ;
(b) boiling potatoes. Give reasons for your directions.
2. Make a list of materials used for polishing, and say for what each is used.
3. What clothing material do you recommend to be worn next the skin ?
Why this instead of other material ?
4. Write out four of Miss Nightingale's rules respecting the care of the sick.
5. (a) What should you do if a child's finger had been badly cut ?
(b) What should you do if a person's clothing had caught fire ?

PRACTICE.

On the cotton furnished you give a specimen, at least three inches in length of each of the following kinds of sewing : Hemming (a wide hem), overseaming, run and fell, gathers set into a band (make the band four inches long), herring-bone stitch.

CLASS II.

CLASS II.

English Language.

1 hr. 30 min.

H. S. BRIDGES, M.A., Ph.D., Examiner.

1. Write down five nouns which have double plurals. Give the plural of :
ox, motto, grotto, madame, chimney, soliloquy.
2. What are defective verbs? Give five examples. Also write down the principal parts of: See, shrive, sow, rise, sling, drag.
3. Define and illustrate the following terms: Inflection, Nominative Absolute, Abstract Noun, Cognate Object.
4. Distinguish carefully between the *Pure Infinitive* and the *Gerundial Infinitive*, giving examples of each.
5. Give the general and detailed analysis of the following passage :
 " Far *up* the lengthening lake were *spied*
 Four darkening specks *upon* the tide,
 That, slow enlarging on the view
 Four manned and masted *barges grew*
 And, *bearing downwards* from Glengyle
 Steered *full upon* the *opening* isle."
6. Parse the words in italics in the foregoing passage.
7. State as clearly as you can the force of the following suffixes: ard, dom, ing, stead. Give at least two examples of each.

N.B.—An option is allowed between the first and third of these questions.

CLASS II.

English Literature.

Time, 1 hr. 30 min.

H. S. BRIDGES, M.A., Ph.D., Examiner.

1. (a) Name the authors of the following quotations;
(b) The poem from which each quotation is made :
 1. "Mark, as it spreads, how deserts bloom and error flies away."
 2. "And there were partings, such as press
The life from out young hearts."
 3. "Careless their merits or their faults to scan
His pity gave, ere charity began."
 4. "A contrite heart, an humble thought,
Are mine accepted sacrifice."
 5. "I ask not proud philosophy
To teach me what thou art."
2. Give the quotation from Shakespeare in Reader No. V., entitled "Character."
3. Write short notes on the italicised words and phrases in—
 1. Twelve days had fear been their *familiar*.
 2. *Warsaw's last champion* from her height surveyed.
 3. From *Jura's* crags and *Mona's* hills.
 4. O'er *fell* and fountain *sheen*.
4. Write *brief* sketches of the lives of either Gray or Campbell, mentioning the chief poetical works of the poet whose life you sketch.
5. Give a short paraphrase of the following :

" 'Tis better to be lowly born,
And range with humble livers in content,
Than to be perk'd up in glistening grief,
And wear a golden sorrow."

CLASS II.

Geometry.*Time, 1 hr. 30 min.*

THOMAS HARRISON, M.A., LL.D., Examiner.

Values

- | | |
|----|---|
| 20 | 1. If from the ends of the side of a triangle there be drawn two straight lines to a point within the triangle these will be together less than the other sides of the triangle but will contain a greater angle. Prove this. Can you discover a greater and a lesser value to which the contained angle must be subject? |
| 20 | 2. If two triangles have two sides of the one equal to two sides of the other, but the angle contained by two sides of one of them greater than the angle contained by the two sides equal to them of the other; the base of that which has the greater angle must be greater than the base of the other. |
| 20 | 3. To describe a parallelogram that shall be equal to a given triangle and have one of its angles equal to a given angle. Solve this problem and state two others that are allied to it. |
| 20 | 4. In an obtuse angled triangle what is the square of the side opposite the obtuse angle equal to? Prove. |
| 20 | 5. To describe a square that shall be equal to a given rectilineal figure. |

 100

CLASS II.

Algebra.

Time, 1 hr. 30 min.

Values

THOMAS HARRISON, M.A., LL.D., Examiner.

15

1. Find the value of $(x+a)(x+b)$;
also find the value of $(x+a)(x+b)(x+c)$;
and of $(x+a)(x+b)(x+c)(x+d)$.

If the coefficients of x in the first result, and those of x^2 and x in the second result, and those of x^3 , x^2 and x in the third are arranged within brackets, (for example, write them $(a+b)x$ instead of $ax+bx$, and so with the coefficients of x^2 and x in the second and third results) you ought to be able to write down, without multiplying, the result for $(x+a)(x+b)(x+c)(x+d)(x+e)$ and to make a general statement as the result of comparison. Make the attempt.

15

2. Find the highest common factor of
 $2x^5-11x^2-9$ and $4x^5+11x^4+81$.

15

3. Find the lowest common multiple of
 $6x^3-11x^2+5x-3$, $9x^3-9x^2+5x-2$.

10

4. Simplify $\frac{a^2+2ab}{a^2+4b^2} \times \frac{ab-2b^2}{a^2-4b^2} \times \frac{a^2+ab}{a-b} \times \frac{(a-b)^2}{a^4-b^4}$

10

5. Solve $\frac{1}{x+1} - \frac{2}{x+2} + \frac{1}{x+4} = 0$

10

6. Solve $\frac{x-a}{x+a} = \frac{c-d}{c+d}$

12

7. At what time between 3 and 4 o'clock will the hands of a clock be in a straight line?

13

8. Nine years ago A was three times as old as B. Now he is only twice as old; find their respective ages.

100

CLASS II.

Physical Science.*Time, 1 hr. 45 min.*

PROF. L. W. BAILEY, PH.D., LL.D., Examiner.

Six questions make a full paper.

1. (a) By what experiments and arguments would you prove that the air exerts pressure upon all surfaces with which it is in contact?
(b) How would you demonstrate the amount of pressure per square inch?
2. How do you account for the suspension of clouds in the air? the separation of clay, sand and gravel by streams? the flight of birds? the descent of rain drops? the occurrence of winds? the ascent of a balloon?
3. Demonstrate, by the aid of experiments, the presence of Nitrogen and Oxygen in the atmosphere.
4. Deduce, and then write, the reaction which occurs when Sodium hydrate is treated with Muriatic acid.
5. Mention two oxides, two metals and a non-metal which will react with water at ordinary temperatures, and write the reactions.
6. How do acids, bases and salts differ in composition? Name and formulate graphically two compounds of each class.
7. Name and give the distinctive properties of four different minerals—one containing sulphur, one carbon, one potassium and another phosphorus—all of which are found in fertile soils.

CLASS II.

Botany.*Time, 1 hr. 45 min.*

PROF. L. W. BAILEY, Ph.D., LL.D., Examiner.

1. Argue that light is necessary to plant growth, basing your arguments on facts you have observed yourself.
Instance a chemical process which ceases when a growing plant is set in complete darkness.
2. Of what use to a plant are the colors of its petals? the irregularity of form in its flowers? Give proofs.
3. How and when did the sugar present in the stems of trees in spring originate? and of what use is it to the plant? Give proofs.
4. What forms of modified branches and of modified leaves do you find on the plant on your desk? Give the special function of each.
5. Write a description, or tabular analysis, of the plant before you, complete as to its visible parts.
6. What serial, class, sub-class, family and generic characters, respectively, does the before-mentioned plant display? Name four families to which it does *not* belong, giving your reasons for excluding it from each.

CLASS II.

Physiology and Hygiene. *Time, 1 hr. 45 min.*

PROF. L. W. BAILEY, Ph.D., LL.D., Examiner.

Six questions make a full paper.

1. From what features do bones get their strength? How are bones joined (1) to each other; (2) to the muscles which move them?
2. Explain the structure of the chest in relation to its use.
3. Compare the structure of the arm and leg, naming the chief bones in each case.
4. What are the effects of alcohol and tobacco on the muscular system?
5. Why is judicious physical exercise necessary to health? Trace the effects on the different organs. Are "strength" and "health" identical?
6. To what successive processes is food subjected during its passage from mouth to large intestine?
7. Name the several vessels by which blood passes into and from the heart. How is the direction of flow determined? Why is it not uniform?

CLASS II.

Industrial Drawing.*Time, 1 hr.*

MR. J. VROOM, Examiner.

NOTE.—*To obtain full credit for strength and boldness of line, drawings should be at least four inches in width. Freehand work throughout.*

Values

25

1. Distinguish between Symmetry and Balance ; and draw a design for horizontal repetition, illustrating balance without symmetry.

25

2. Draw any two war flags, or merchant flags of the nations of Europe, indicating colors as follows : Yellow, by dots ; red, by vertical lines ; blue, horizontal lines ; green, oblique ; black, vertical and horizontal ; white, unmarked ; *or*,

Draw a quatrefoil within a circle, illustrating the use of half tint.

50

3. Draw the group of objects before you, with due attention to shading and perspective ; *or*,

Draw a ball, indicating by means of shadow that it is resting on a flat surface.

100

CLASS II. **Teaching and School Management.** *Time, 2 hrs.*

G. U. HAY, Ph.B., M.A., Examiner.

Values

- | | |
|-----|---|
| 10 | 1. (a) Outline the physical conditions ;
(b) Outline the mental qualifications, of successful teaching. |
| 15 | 2. Give a concise account of how you would proceed during the first day on assuming charge of an ungraded country school. |
| 15 | 3. State what course you would pursue with reference (a) To Rewards ; (b) to Punishments. |
| 15 | 4. How would you direct pupils as to the preparation of Home Lessons, in order to secure accuracy and interest ? |
| 15 | 5. Give an outline of a Reading lesson.
(a) Your own preparation of it ;
(b) The pupil's preparation (if any);
(c) How you would conduct the lesson. |
| 15 | 6. Tell how you would proceed in giving your first lesson on common fractions. |
| 15 | 7. State fully how you would give a lesson (object) on coal to a primary class. |
| 100 | |

CLASS II.

School System.*Time, 1 hr.*

Values

G. W. MERSEREAU, M.A., Examiner.

- | | |
|----|---|
| 15 | 1. Show how the County School Fund is raised and specify the several purposes for which it is distributed. |
| 15 | 2. Give the substance of the several paragraphs of the Teacher's contract. |
| 15 | 3. Name three officers of a common School District and state their duties. |
| 12 | 4. Name three necessary qualifications of every voter at a school meeting. |
| 15 | 5. How are school grounds chosen and what provision is made for their improvement? |
| 16 | 6. What are the Teacher's duties in respect to :
(1) Providing employment for pupils ;
(2) Caring for school property ;
(3) Being regular and punctual at school ; and
(4) Attending meetings of the County Institute ? |
| 12 | 7. What is the Teacher's duty in respect to :
(a) Making half-yearly return ;
(b) Holding public examination ;
(c) Roll call ;
(d) Comfort of pupils ? |

CLASS II.

Time, 1 hr. 30 min.

Book-Keeping and Arithmetic.

MR. J. VROOM, Examiner.

Values

- 10 1. What is meant by Trade Discount? Voucher? Debenture? Bill of Lading? Tariff? Contraband Goods? Days of Grace? Negotiable Paper? Account Sales? Legal Tender?
- 5 2. At what value should Merchandise be reckoned in taking stock?
- 10 3. John Robinson buys from us 10 hhds. N. O. Molasses, 625 gallons, at 40c.; 29 hf. ch. Ool. Tea, 1000 lbs., at 50c.; 17 bags Rio Coffee, 1500 lbs., at 16c. He pays half the amount in cash, gives his note at three months from July 1st for \$300, and pays the balance by an order on Henry Thompson. Make out Robinson's bill of goods in proper form.
- 10 4. Referring to above transaction, write out the Note, and the Order.
- 10 5. Referring to same transaction, find the proceeds of the Note, discounted at the bank Sept. 1, at 6 per cent.
- 20 6. George Johnston's account on our Ledger stands as follows:
- | Dr. | | | GEORGE JOHNSTON. | | | Cr. | | |
|----------|-----------------|----------|------------------|-------|--|-----|----------|--|
| 1898 | | | | 1898 | | | | |
| April 1. | Mdse. at 3 mos | \$375 00 | June 1. | Cash, | | | \$200 00 | |
| May 1. | Mdse. at 4 mos. | 600 00 | " 15. | " | | | 100 00 | |
- When is the balance of this account due?
- 20 7. Open a cash book and make proper entries for the following:
- (a) We have in hand Cash \$34.50.
 - (b) Paid \$7.10 for freight and cartage.
 - (c) Hugh McDonald has paid us \$50 on account.
 - (d) A Twenty Dollar gold piece missing, supposed to be lost or stolen.
 - (e) Received for cash Sales, \$48.32.
- 15 8. How many barrels of Flour can be bought for \$5,924.38 by an agent who pays \$7 a barrel for the Flour, charges 3 per cent. commission, and pays \$315 freight?
- 100